

Amendments to the Specification

Please replace paragraph 19, on page 8, with the following rewritten paragraph:

[0007] FIG. 2 depicts a sample embodiment of a system 106 in accordance with certain embodiments. As an overview, in this embodiment, the system 106 stores context data for different connections in a memory 112. For example, for the TCP protocol, this data is known as TCB (Transmission Control Block) data. For a given packet, the system 106 looks-up the corresponding connection context in memory 112 and makes this data available to the processor 122, in this example, via a working register 118. Using the context data, the processor 122 executes an appropriate set of protocol ~~embodiment~~ instructions from storage 126. Context data, potentially modified by the processor 122, is then returned to the context memory 112.

Please replace paragraph 25, on page 9, with the following rewritten paragraph:

[0025] After retrieval of connection data for a packet, the system 106 can perform protocol operations for the packet, for example, by processor 122 execution of protocol ~~embodiment~~ instructions stored in storage 126. The processor 122 may be programmed to “idle” when not in use to conserve power. After receiving a “wake” signal (e.g., from the input sequencer 116 when the connection context is retrieved or being retrieved), the processor 122 may determine the state of the current connection and identify the starting address of instructions for handling this state. The processor 122 then executes the instructions beginning at the starting address. Depending on the instructions, the processor 122 can alter context data (e.g., by altering working register 118), assemble a message in a send buffer 128 for subsequent network transmission, and/or may make processed packet data available to the host (not shown). Again, context data, potentially modified by the processor 122, is returned to the context data memory 112.